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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,705	09/27/2000	Gerhard Reichert		6878

7590 05/31/2006
Fred Zollinger III
6370 Mt. Pleasant Ave, NW
PO Box 2368
North Canton, OH 44720

EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/670,705

Applicant(s)

REICHERT, GERHARD

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32,33 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32,33 and 36-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/9/06 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 32, 33, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glover et al. (U.S. Patent 5,007,217) in view of Battersby (U.S. Patent 3,759,771).

Glover et al. disclose a method of fabricating an insulating glazing unit including providing a first glass sheet having a first perimeter (41 of Figure 2A), providing a second glass sheet having a second perimeter (41 of Figure 2A), disposing between the first and second glass sheets a foam body spacer (40 of Figure 2A) including a desiccant, a moisture barrier layer (46 of Figure 2A), and two insets that define two notches such that an outward channel and desiccant accessible insulating chamber are formed, applying an adhesive (43 of Figure 2A) to directly bond the first and second glass sheets to the opposing sides of the spacer wherein the moisture barrier layer and notches face the channel and each notch is adjacent a glass sheet, applying a

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primary sealant (44 of Figure 2A) in the channel only at the notches of for example polyisobutylene (a moisture impermeable sealant as defined by applicants at page 10, lines 20-22 and page 11, lines 1-4 of the specification which functions to hermetically seal the insulating chamber), and applying a secondary thermosetting sealant (47 of Figure 2A) in the channel of for example silicone (a structural sealant as defined by applicants at page 11, lines 7-10) (Figures 2A and 2B and Column 6, lines 61-66 and Column 7, lines 5-6 and 25-26 and Column 8, lines 50-68 and Column 9, lines 1-12). Glover et al. appear to teach the primary sealant is pre-applied to the notches of the spacer prior to disposing the spacer between the glass sheets (Column 8, lines 61-68 and Column 9, lines 1-5). Glover et al. further teach, at least in other embodiments, the primary sealant is applied to the spacer after disposing the spacer between the glass sheets (Column 9, lines 6-12). However, there is no specific recitation of applying the primary sealant to the notches of the spacer after the spacer is disposed between the glass sheets. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the primary sealant in Glover et al. to the notches of the spacer after the spacer is disposed between the glass sheets, i.e. applying the primary sealant to contact the spacer and glass sheets at the same temperature and pressure, as opposed to pre-applying the primary sealant as was well known in the art and shown for example by Battersby wherein applying the primary sealant to the spacer after disposing the spacer between the glass sheets is advantageous because applying the primary sealant to both the spacer and glass sheets simultaneously heats the spacer and glass sheets and forms a stronger bond between them than would be achieved with a pre-applied primary sealant.

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Battersby discloses a method of making an insulating glazing unit (double glazing unit) (Column 1, lines 54-63). Battersby teaches providing a pair of glazing sheets separated by a spacer wherein the spacer is spaced inwardly from the perimeter of the sheets forming an outwardly facing channel and an inward insulating channel (Figures 1 and 5-7 and Column 2, lines 24-29 and 57-60). Battersby teaches sealing the insulating chamber by applying a primary and secondary sealant into the provided outwardly facing channel (Column 2, lines 30-34 and 63-72 and Column 3, lines 1-61). Alternatively, Battersby teaches the primary sealant may be pre-applied to the spacer prior to disposing the spacer between the glazing sheets (Column 4, lines 16-23). However, Battersby teaches applying the primary sealant to both the spacer and glazing sheets simultaneously at the same temperature and pressure, i.e. applying the primary sealant after disposing the spacer between the glazing sheets, heats the spacer and glass sheets and forms a stronger bond between them than would be achieved with pre-applied sealants (Column 4, lines 43-47). Battersby further teaches the sealants are applied through an applicator with at least one heads/nozzles. Battersby teaches that the first and second sealants may be different (Column 4, lines 16-23), and the sealants comprise a wide variety of materials including polyisobutylene, polyurethane, and thermosets (Column 3, lines 62-63 and Column 4, lines 7 and 12-13). Battersby teaches that the sealants prevent the entry of dust and/or moisture into the insulating chamber (Column 2, lines 30-34). Battersby further teaches that the spacer may be formed of metal, plastics, or wood and may include a desiccant (Column 2, lines 40-44), and the spacer may have notched corners between the glazing sheets and the spacer with the first sealant applied in the notched corners (Figures 2-6 and Column 2, lines 45-56).

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Regarding claim 36, Battersby teaches the primary and secondary sealant are applied at a sealing station from an applicator having at least one head/nozzle (Column 2, lines 63-72 and Column 3, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the primary and secondary sealants taught by Glover et al. using multiple sealant stations of the applicator type suggested by Battersby having only one sealant head/nozzle as only the expected results would be achieved.

Regarding claims 37 and 38, Battersby teaches the applicator may comprise two heads/nozzles wherein the second applicator head trails the first, thus the second sealant covers the first (Figures 2-4 and Column 2, lines 63-71 and Column 3, lines 1-2 and 11-17 and 40-45). It is noted that in the method and apparatus of Battersby retracting the first applicator head/nozzle does not appear necessary. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to retract the first head/nozzle if the head/nozzle would disturb the application of the second sealant.

Response to Arguments

4. Applicant's arguments with respect to claims 32, 33, and 36-40 have been considered but are moot in view of the new ground(s) of rejection. In view of applicants amendment to require primary sealant only in the notches the previous rejections over Town (U.S. Patent 6,002,521) are withdrawn. A new rejection addressing the new limitation of applying the primary sealant to the spacer and glass sheet at the same temperature and pressure is made above.


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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff